

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0033031; AI 43895; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I.     **THE APPLICANT IS:**           Town of Waterproof  
  Waterproof Wastewater Treatment Plant  
  P.O. Box 248  
  Waterproof, LA 71375
  
- II.    **PREPARED BY:**               Rachel Davis
  
- DATE PREPARED:**           October 27, 2009
  
- III.   **PERMIT ACTION:**           reissue LPDES permit LA0033031, AI 43895; PER20090001  
  
   LPDES application received: September 2, 2009  
  
   EPA has not retained enforcement authority.  
  
   LPDES permit issued: September 1, 2000  
   LPDES permit expired: August 31, 2005

### IV.    **FACILITY INFORMATION:**

- A.    The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Waterproof.
  
- B.    The permit application does not indicate the receipt of industrial wastewater.
  
- C.    The facility is located at the intersection of Florida Avenue and Texas Lane in Waterproof, Tensas Parish.
  
- D.    The treatment facility consists of a sequence batch reactor with a ten acre equalization basin. UV is the method of disinfection.

#### E.    **Outfall 001**

Discharge Location:   Latitude 31° 48' 46" North  
  Longitude 91° 23' 4" West

Description:           treated sanitary wastewater

Design Capacity:       0.15 MGD

Type of Flow Measurement which the facility is currently using:  
  Combination Totalizing Meter / Continuous Recorder

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**V. RECEIVING WATERS:**

The discharge is into Bayou Buffalo, thence into Muddy River, thence into Big Choctaw Bayou in segment 081201 of the Ouachita River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 081201 of the Ouachita River Basin are as indicated in the table below<sup>1/</sup>:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 081201 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 081201 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 24, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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For additional information, contact:

Ms. Rachel Davis  
Water Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:****Final Effluent Limits:**

Subsegment 081201, Tensas River-Headwaters to Jonesville, is not listed on LDEQ's Final 2006 303(d) List. However, subsegment 081201 was previously listed as impaired for pesticides, organic enrichment/Low DO, nutrients, suspended solids/turbidity, and phosphorus, for which TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

*TOTAL MAXIMUM DAILY LOAD (TMDL) For TSS, Turbidity, and Siltation For 13 Subsegments in the Ouachita River Basin*

According to the TMDL, "Wastewater treatment facilities discharge primarily organic TSS, which does not contribute to extensive habitat impairment resulting from sedimentation. The organic TSS is a nonconservative constituent that would only be detected as a component in proximity to the discharge point. Municipal permits contain a TSS limitation and a specific narrative requirement to prevent organic solids accumulation. Because an enforceable mechanism is in place to protect from discharges of organic suspended solids no TMDL is required for these materials." Therefore, the TSS limitation will stay the same as the previous permit.

*Tensas River TMDLs for Dissolved Oxygen and Nutrients*

Based on the TMDL, "Of the 7 oxygen demanding point source discharges in the Tensas River subsegment (see Section 2.3.1), only 1 discharge was included in the model (the City of Tallulah wastewater treatment plant,(WWTP)). The other 6 oxygen demanding discharges, which included the Town of Waterproof, were included in the TMDL calculations but were not explicitly modeled because their impact on the main stem of the Tensas River was considered to be negligible due to their distance from the main stem. The WLA for these minor point sources was calculated based on current permit limits with no load reductions." Therefore, since the previous permit did not have a dissolved oxygen limitation, no limitation will be required in this permit.

*Total Maximum Daily Load for Selected Pesticides in the Ouachita River Basin*

"Runoff from agricultural and urban areas has been identified as a major nonpoint source of pesticides in surface waters. Because urban land use accounts for less than 1% of the area in the impaired subsegment watersheds, the primary source of pesticides in the surface waters of these subsegments is due to agriculture." Therefore no limitation for pesticides will be required of this facility.

### OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD <sub>5</sub>	13	10 mg/l	15 mg/l	Limits are set in accordance with the Ouachita River Basin Plan for facilities of this treatment type and size.
TSS	19	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	6	5 mg/l	10 mg/l	Limits are set in accordance with the Ouachita River Basin Plan for facilities of this treatment type and size.

\*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD<sub>5</sub> and TSS in terms of concentration.

#### Other Effluent Limitations:

##### 1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

##### 2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

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**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X. PREVIOUS PERMITS:**

LPDES Permit No. LA0033031: Issued: September 1, 2000

Expired: August 30, 2005

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	5 mg/l	10 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning **June 2007** and ending **June 2009** for this facility.

Date: March 20, 2009

Inspector: Madelon Carter

Findings and/or Violations:

1. The valve directed to the lift station is closed
2. The valve directed to the equalization basin is open. The wastewater is flowing into the equalization basin.
3. Lift station is not properly working
4. The electric circuit panel is displaying failure lights
5. There are 6 out of 40 UV lights working
6. There is no discharge from the outfall

Date: January 26, 2009

Inspector: Madelon Carter

Findings and/or Violations:

1. Operating without a permit
2. Unauthorized discharge of wastewater
3. An observed bypass to the left of sludge beds
4. Facility is not properly operating or maintaining all facilities and systems of treatment

**B) Compliance and/or Administrative Orders**

A review of the files indicates the following most recent enforcement actions administered against this facility:

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**LDEQ Issuance:**

Docket #: WE-CN-09-0047

Date Issued: March 20, 2009

**Findings of Fact:**

1. Failed to submit a renewal application
2. Does not have an active LPDES permit
3. Inspection conducted on 1/26/09 revealed an unauthorized bypass of the sequencing batch reactor
4. Inspections on 2/25/09 shows that the respondent continued to bypass the SBR
5. DMR review revealed numerous violations
6. Respondent did not submit non-compliance reports
7. Facility consistently exceeded its flow limit authorized by the permit (0.15 MGD)

**Order:**

1. Submit application within 30 days
2. Continue to follow effluent limitations
3. Take all steps necessary to meet and maintain compliance
4. Submit within 30 days a written report that includes a detailed description of the circumstances surrounding the cited violations

**C) DMR Review**

A review of the discharge monitoring reports revealed that the facility has not submitted any DMRs since 2003.

**XII. ADDITIONAL INFORMATION:**

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs, if the effluent standard, limitations, water quality studies or TMDLs so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.15 MGD.

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Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.15 \text{ MGD} \times 10 \text{ mg/l} = 13 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
CBOD <sub>5</sub>	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Due to the absence of pretreatment categorical standards for the indirect discharges listed above or the discharge is of sanitary wastewater only, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0038521.

This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

<b>Audit Period Begins</b>	<b>Audit Period Ends</b>	<b>Audit Report Completion Date</b>
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

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Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Waterproof, Waterproof Wastewater Treatment Plant, September 2, 2009.